SURVEYED BY	
SUPERVISED BY	
DESIGNED BY	

DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT

	REVISED	STATE	FEDERAL AID		STATE					
Г		SIHIE	PROJECT	ROUTE	PROJECT	SHEET NO.				
	NEW 7/17/08	VA.		7		20				

## UTILITY RELOCATION SUMMARY

PROJECT NO.	Sheet Number	Concrete, Communication Duct Bank, 1.5"-8 Way	Steel Communication Duct Bank, 1.5"-8 Way	Concrete, Communication Duct Bank, 4"-4 Way	Steel, Communication Duct Bank, 4"-4 Way	Concrete, Communication Duct Bank, 4-1 Way	Steel, Communication Duct Bank, 4-1 Way	Concrete, Communication Duct Bank, 2-3 Way	Concrete, Communication Duct Bank, 1.5"-28 Way	Concrete, Communication Duct Bank, 1.5"-4 Way	Steel, Communication Duct Bank, 1.5"-4 Way	Communication Vault 6' x 6' x 12'	Communication Vault 4' x 4' x 4'	Communication Vault 8' x 8' x 8'	Communication Vault 4' x 6' x 4'	Communication Conduit Bundle, 1.5"-28 Way	Communication Conduit Bundle, I.5"-4 Way	Handhole 3' x 5' x 3'	Handhole 3' x 4' x 3'	Pedestals 3' x l' x 3'	
		LF.	LF.	LF.	LF.	LF.	LF.	LF.	LF.	LF.	LF.	EA.	EA.	EA.	EA.	LF.	LF.	EA.	EA.	EA.	
	TOTAL	2,200	810	3,300	810	1,400	810	3,000	40	2,240	810	2	3	/	1	2,210	2,590	<i>2</i> 7	12	2	

• NOT A PAY ITEM. SEE NOTE 5 FOR DETAILS

IN PROGRESS 09/26/08
NOT FOR CONSTRUCTION

## GENERAL NOTES:

I. ALL COMMUNICATION CONDUIT WORK SHOWN ON THESE UTILITY RELOCATION PLANS ARE BEING CONSTRUCTED FOR USE OF VERIZON, RGCYIPES, LEVEL 3, XO, MCI / VERIZON BUSSINESS (COMMUNICATION COMPANIES), THE CONTRACTOR MAY CONSULT WITH THEIR REPRESENTATIVES AT THE FOLLOWING PHONE NUMBERS TO OBTAIN ADDITIONAL TECHNICAL INFORMATION:

WOODLAWN: BUD CASPARI - (571) 236-0073
RENEE CHUBBS [ON-TIME UTILITY SOLUTIONS] - (703) 788-1533

RGC\YIPES: JAMES HOOFNAGLE -(202) 216-7865 TONY MACK [MACK COMM.] - (703) 867-1741

VERIZON: JERRY BROWN - (540) 359-5207 JIM TEMPLE - (540) 359-5206

LEVEL 3: JODY WILLIAMS - (703) 673-7520

XO: MARK JOHNSON [EXPRESS TECHNOLOGIES] - (540) 752-6691

MCI / VERIZON BUSINESS: ADAM RICE - (571) 220-8978

- 2. LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY BE INCOMPLETE. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF UTILITIES WITH TEST HOLES AND/OR OTHER METHODS. TEST HOLES, TEST PITS, OR OTHER METHODS TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES IS INCIDENTAL TO THE WORK AND SHALL BE INCLUDED IN THE PRICE BID FOR OTHER CONTRACT ITEMS.
- 3. THE CONTRACTOR SHALL PLAN AND SCHEDULE ALL CONTRACT WORK TO ACCOMODATE THE LOCATION OF ALL EXISTING OVERHEAD COMMUNICATION LINES AND UNDERGROUND DUCT BANKS OF THE COMMUNICATION COMPANIES. THE CONTRACTOR SHALL ARRANGE FOR ANY REQUIRED TEMPORARY OUTAGES TO ACCOMMODATE THE CONTRACTOR'S WORK. SHOULD THE CONTRACTOR WISH TO TEMPORARILY RELOCATE ANY OF THE COMMUNICATION COMPANIES FACILITIES, IT SHALL BE DONE SOLELY AT THE CONTRACTOR'S EXPENSE. ANY REQUESTS FOR TEMPORARY UTILITY RELOCTIONS, SHALL BE SUBMITTED IN WRITING TO THE ENGINEER 30 DAYS IN ADVANCE OF ANY WORK COMMENCING TO RELOCATE FACILITIES. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO FULLY COORDINATE ANY REQUESTED OUTAGES AND/OR TEMPORARY RELOCATIONS WITH AFFECTED PARTIES.
- 4. THE COST FOR DUCT BANK SHALL INCLUDE BUT NOT BE LIMITED TO (AMONG OTHER ITEMS LISTED IN THE SPECIAL PROVISIONS) SAWCUTTING, DEMOLITION, REMOVAL, DISPOSAL AND RESTORATION OF CURBS, SIDEWALKS, TRAILS AND PAVEMENT STRUCTURES (FLEXIBLE AND RIGID) WITHIN THE LIMITS AND TYPES SHOWN ON THE PLAN.
- 5. THE COMMUNICATION COMPANIES SHALL PROVIDE THE CONTRACTOR 30 INCH FRAME AND COVERS FOR ALL PROPOSED VAULTS, BALL MARKERS FOR TERMINAL RUNS, HANDHOLES AND PEDESTALS. THE CONTRACTOR SHALL ALLOW 30 DAYS LEAD TIME TO ORDER AND OBTAIN FRAME AND COVERS, MARKERS, HANDHOLES AND PEDESTALS FROM THE COMUNICATION COMPANIES. COST TO INSTALL AND OBTAIN FRAME AND COVER, BALL MARKERS, HANDHOLES AND PEDESTALS, SHALL BE INCLUDED IN THE BID PRICE FOR THE COMMUNICATION VAULT. SEE COMMUNICATION DUCT BANK SPECIAL PROVISION.
- 6. ALL VAULTS ARE TO BE CONSTRUCTED TO SUPPORT VEHICLE TRAFFIC. ALL VAULTS ARE TO HAVE 30 FRAME AND COVER TO MEET THIS RATING. AN 8 BED OF 21-A IS TO BE PLACED IN THE BOTTOM OF THE EXCAVATION HOLES PRIOR TO SETTING THE VAULTS. ALL PRECAST CONCRETE VAULTS AND HANDHOLES ARE TO BE SET SO THE FRAME AND COVER IS FLUSH WITH THE FINAL GRADE SURFACE. A PRECAST OR FIELD CONSTRUCTED RISERS IS TO BE INSTALLED BETWEEN THE FRAME AND COVER AND THE TOP OF VAULTS. THE MINIMUM RISER HEIGHT SHALL BE 12" WITH A MAXIMUM OF 48". THIS RISER HEIGHT IS ADJUSTABLE WITHIN THE RANGE GIVEN TO COMPENSATE FOR THE SETTING DEPTH OF THE VAULT AS INSTALLED. GROUND RODS AND HARDWARE SHALL ALSO BE INSTALLED IN EACH VAULT IN ACCORDANCE WITH THE ATTACHED DRAWINGS AND THESE GENERAL NOTES (SEE NOTE). CONDUITS ENTERING OR EXITING VAULTS OR HANDHOLES ARE TO BE FITTED WITH BELL ENDS. GROUTED AND PLUGGED OR CAPPED. BELL ENDS ARE TO BE INSTALLED ON CONDUIT AT THE POINT WHERE IT ENTERS A VAULT THE BELL ENDS SHALL BE FLUSH WITH THE INTERIOR WALL AND THE WALL SHALL BE PARGED. ALL EXCESS CONCRETE SHALL BE REMOVED. WHEN CONSTRUCTION OF THE CONDUIT LINE IS COMPLETE ALL CONDUIT SHALL BE RODDED WITH A MANDREL HAVING A DIAMETER OF 1/4" LESS THAN BORE DIAMETER OF THE CONDUIT AND WILL THEN BE BRUSHED WITH A STIFF WIRE BRUSH. "POLYOLEFIN", 1000 POUNDS STRESS PULL ROPES WILL THEN BE INSTALLED IN EACH OF THE CONDUITS TO ACCOMMODATE THE CABLE PULLING.
- 7. ALL TRENCH EXCAVATION SHALL INCLUDE REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL OFFSITE AT NO ADDITIONAL COST TO THE DEPARTMENT. TRENCH BACKFILL SHALL CONSIST OF SUITABLE REGULAR BACKFILL AS DETERMINED BY THE ENIGINEER. TRENCH BACKFILL MATERIAL SHALL BE OBTAINED FROM THE SUITABLE MATERIAL REMOVED FROM THE TRENCH OR OBTAINED FROM OTHER EXCAVATION ITEMS INCLUDED ON THE PROJECT. EXCESS SUITABLE MATERIAL OBTAINED FROM TRENCH EXCAVATION ACTIVITIES SHALL BE STOCKPILED AT NO ADDITIONAL COST TO THE COUNTY. DEBRIS, SUCH AS ROCKS, PIECES OF WOOD, BRUSH AND OTHER SIMILAR MATERIALS, SHALL NOT BE BACKFILLED INTO TRENCHES. THE TRENCH DEPTH AND THE LEVEL OF CONDUITS SHALL BE CONSTRUCTED AS SHOWN ON THE PROFILES WITH MINIMUM COVER OF 30 INCHES FROM FINAL GRADE TO THE TOP OF THE CONCRETE ENCASEMENT FOR PRIMARY APPLICATIONS. THE MINIMUM COVER SHALL BE 42 INCHES FOR ALL CONDUIT SYSTEMS WITHIN VIRGINIA DEPARTMENT OF TRANSPORTATION HIGHWAY RIGHT-OF-WAY.
- 8. FOR A LIST OF APPROVED CONTRACTORS SEE SPECIAL PROVISION FOR COMMUNICATION DUCT BANK.
- 9. MARKING TAPE, PROVIDED BY THE COMMUNICATION COMPANIES, SHALL BE PLACED 12 INCHES BELOW FINAL GRADE FOR ALL DUCT BANKS AND CONDUIT BUNDLES.



UTILITY RELOCATION PLAN
GENERAL NOTES AND SUMMARY

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
			20